

55 Stevens # 56
12-1401

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

Confirmation No.: 4482

OHMI et al.

Group Art Unit: NOT ASSIGNED

Appln. No.: 09/866,576

Examiner: NOT ASSIGNED

Filed: May 29, 2001

Title: SEMICONDUCTOR DEVICE FORMED ON (111) SURFACE OF A Si
CRYSTAL AND FABRICATION PROCESS THEREOF

September 21, 2001

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PRELIMINARY AMENDMENT

Hon. Commissioner of Patents
Washington, D.C. 20231

Sir:

Please amend the above-identified application as follows:

AMENDMENTS

IN THE SPECIFICATION:

Page 1, delete the whole paragraph starting in line 29 and replace it with the following new paragraph:

9'

However, a satisfactory oxide film that satisfies the requirements with regard to interface characteristics of the oxide/Si substrate interface, breakdown characteristics, and leakage current characteristics, is obtained only when the surface of the Si substrate has a (100) orientation as far as thermal oxidation process is used. When a thermal oxidation process is applied to a Si substrate having a surface orientation other than the (100) surface for forming a gate oxide film, there arises various problems in the gate oxide film such as increased surface state density at the oxide/Si substrate interface as compared with case of forming the Si oxide film on the (100)-oriented Si substrate. Further, the oxide film thus formed suffers from the problem of poor breakdown voltage characteristics or poor leakage current characteristics.